this week

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BMA

Doctors seek pension chaos redress

The BMA must lobby NHS England and the government to investigate and compensate doctors who have become ill or have been unable to retire as a result of Capita's pension "failings," the BMA's annual representative meeting voted this week.

Delegates unanimously passed a motion calling for action against Capita because of its "catastrophic failings in dealing with GP pension contributions." The motion said the contract should be terminated and investigations should be held to assess its effects on doctors.

A tax amnesty should also be declared for doctors with excessive tax bills caused by Capita not forwarding their pension contributions for many years, causing them to unknowingly exceed their allowances.

Speaking for the motion, James Murphy from South Central Regional Council, said, "There are truly heartbreaking examples of where the loss of pension data has been hugely detrimental to our members. Take, for example, the doctor who retired with ill health and had no pension for a year because his information had gone missing.

"How about the terminally ill cancer patient who was unable to finalise their will before they died because their pension data had gone missing? Or the doctor threatened with eviction because he was unable to provide the court with pension data during a divorce settlement case?"

He continued, "There are also lower grade cases where GP time and energy have been wasted in submitting, resubmitting, and resubmitting again paperwork. The end result is doctors subsidising a pension system that is being run on a shoestring—the inevitable result of NHS England handing the contract to the lowest bidder."

A Capita spokesperson said, "We remain committed to deliver services that are helping NHS England save money and transform locally managed, paper-based operations into an efficient national service. There were a number of historical issues with collecting GP pension data which we have been addressing."

Delegates debated other pension motions, including one that said that calculating pension contributions on the basis of full time equivalent earnings for doctors who worked part time was unfair, as they should be based on actual earnings. The motion, which passed unanimously, called on the government to calculate loss of earnings to recompense those affected.

Elisabeth Mahase, Belfast

Cite this as: *BMJ* 2019;365:l4401

Delegates to the BMA annual representative meeting voted to demand the government investigate Capita's "failure"

LATEST ONLINE

- Doctors have reduced extra work and avoided promotion because of pension changes, poll finds
- NHS needs to "cross the rubicon" of explaining service closures to patients, regional health boss says
- Hundreds of NHS consultants have financial conflicts with private hospitals

SEVEN DAYS IN

“Bonkers” paperwork demanded for non-EU doctors needs reform, says GMC

The government should legislate to make it easier for doctors from outside Europe to work in the NHS, the GMC’s chief executive has said. Charlie Massey said the “equivalence” process that requires doctors from outside the European Economic Area to fill in “about 1000 pages of paperwork” was “bonkers.”

Speaking at the NHS Confederation Conference in Manchester last week, Massey said making the process less bureaucratic could make a “big difference” to efforts to bolster the NHS medical workforce—particularly important given the possible impact of Brexit.

Massey said the UK was seeing “an unprecedented increase” in the number of non-EEA doctors, revealing that the GMC expects to register 10 000 such graduates this year. But he added: “If you are a non-EEA doctor you have to jump through a lot of hoops. You may have to fill in about 1000 pages of paperwork to demonstrate that all your experience and training meets the standard. That’s bonkers. It would be much more straightforward if we could say: the royal college is happy that to be a GP in country X, the curriculum for training maps against the UK, ‘tick.’ If my opposite number is able to assure me there are no fitness to practise concerns, ‘tick.’ We should have a more open way to get those doctors in.”

Gareth Iacobucci, *The BMJ* Cite this as: *BMJ* 2019;365:l4359

Vaccination

UK must tackle scepticism among younger people

The UK cannot be complacent about vaccination rates despite having a higher public confidence rate than in many other European nations, global experts warned. Just under half of people in the UK strongly agree that vaccines are safe (46%). While significantly higher than the 40% in the rest of Europe, this is some way below the global average 61%, said the Wellcome Global Monitor, which polled more than 140 000 people in 140 countries.

US vaccine injury data show strong safety record

Only 6600 people have been compensated for vaccine injuries in 31 years of the US National Vaccine Injury Compensation Program, said a *New York Times* review, indicating that vaccination in the US has been far safer than widely believed. The review was triggered by a congressman’s question to Facebook’s chief executive, Mark Zuckerberg, in a letter accusing the social media company of suppressing free speech among vaccine sceptics.

Antibiotic resistance

WHO urges more use of some drugs, less of others

The World Health Organization urged governments around the world to implement a tool to limit antimicrobial resistance, as part of a global campaign. The AWaRe tool classifies antibiotics into three groups: Access, Watch, and Reserve. It shows which antibiotics to use for common or serious infections, which ones should be used sparingly or preserved, and which should be used only as a last resort. WHO said that the campaign could increase the proportion of global antibiotic consumption in the Access group by at least 60%.

Davies is named as UK special envoy

England’s outgoing chief medical officer, Sally Davies (below), has been appointed the UK’s special envoy on antimicrobial resistance. The appointment of Davies—who has been vocal about resistance during her tenure—complements a £32m government investment to fund UK led research into the problem. The money will be allocated to 10 leading research centres to inform prescribing and identify patterns of resistance.

Access to medicines

Poor countries pay up to “30 times more” for drugs

Some poor countries pay 20 to 30 times more than wealthy ones for basic drugs such as paracetamol, said a report from the Center for Global Development. In the poorest countries unbranded generics are widely distrusted and account for only 5% of sales, whereas in the US unbranded, quality assured generic drugs form 85% of the market. Lack of competition in developing countries means that one company can secure 80% of sales of certain drugs.

Stroke

NHS rolls out specialist centres in England

Specialist centralised stroke units will be launched throughout England in an effort to save thousands of lives. Units like the existing ones in London and Manchester (above) will give patients faster access to specialist diagnosis and treatment, said NHS England. Announcing the

plans at the NHS Confederation conference in Manchester on 20 June, Stephen Powis, NHS England’s national medical director, acknowledged that service reconfigurations can be “difficult” but said, “Clinicians need to drive this forward because we need to save lives.”

Competition rules

MPs back plans to promote NHS collaboration

An influential committee of MPs backed plans by NHS England and NHS Improvement to repeal section 75 of the Health and Social Care Act 2012 to promote collaboration in the NHS and the wider health and care system. “Competition rules add costs and complexities without corresponding benefits for patients and taxpayers,” the Health and Social Care Committee concluded. But its report said the NHS should not become a monopoly as this would not be in the best interests of patients.

MEDICINE

Gambling

NHS opens young people's addiction service

The NHS is to open its first gambling clinic for children this year. It comes amid growing concern about young people affected by problem gambling, fuelled by online gaming sites and targeted adverts. The National Problem Gambling Clinic in London will cater for people aged 13 to 25. NHS England is also opening gambling clinics for adults in Leeds, Manchester, and Sunderland. The Gambling Commission estimates that 450 000 young people gamble regularly in the UK, of whom 55 000 have a gambling problem.

Stevens calls for betting tax to treat addiction

NHS England's chief executive called for a tax on bookmakers to fund treatment for people with a gambling addiction. Simon Stevens said the industry's spending on support for problem gamblers was "just a fraction" of the £1.5bn spent on advertising. "The sums just don't add up, and that is why as well as voluntary action it makes sense to hold open the possibility of a mandatory levy," he said.

Patient feedback

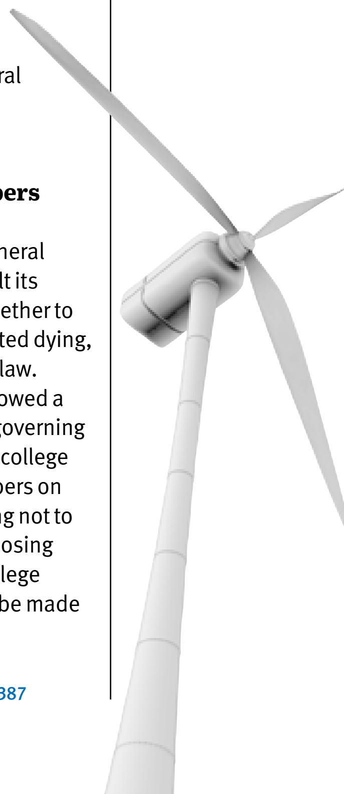
Satisfaction with England's hospital care falls

The Care Quality Commission's annual survey found that satisfaction among inpatients in England (polled in July 2018) had stalled or fallen across many key indicators. Although most people had confidence in doctors and nurses and thought that staff answered questions clearly, more people reported long delays, greater dissatisfaction with information provided on discharge, and a lack of involvement in their care than in 2017. More than 75 000 adults were polled at 144 acute trusts.

Climate change

Call for action on "true health emergency"

More than 70 US health organisations, including the American Medical Association, the American Academy of Pediatrics, and the American College of Physicians, called on the government and business and civil leaders to recognise climate change as a health emergency and to prioritise action to protect health. They set out 10 policies, including reducing greenhouse gas emissions, moving to renewable energy, emphasising active transport, and promoting healthy and sustainable farms, food systems, and natural lands.



Assisted dying

RCGP to poll members on law change

The Royal College of General Practitioners will consult its 53 000 members on whether to alter its stance on assisted dying, to back a change in the law. The announcement followed a meeting of the RCGP's governing council on 22 June. The college last consulted its members on the issue in 2013, opting not to change its position opposing any law change. The college said further details will be made public in due course.

Cite this as: *BMJ* 2019;365:l4387

PENSIONS

Some 20% of senior NHS employees said they had avoided promotion because of pensions tax, and 42% had cut down on extra work

[NHS Employers poll of 2521 staff (72% consultants) at 30 organisations]

SIXTY SECONDS ON . . . AGONAL BREATHING

SOUNDS PAINFUL. WHAT IS IT?

It's the gasping sound made by someone struggling to breathe that has been harnessed by University of Washington researchers. They've developed a tool that listens to sleeping people's breathing and picks up the breaths—which are present in about half of people who experience cardiac arrests, data from the 911 emergency phone service show. The tool will then call for help.

ALEXA, LISTEN TO ME SLEEP . . .

That's the idea. The researchers designed the tool for smart speakers such as Google Home and Amazon Alexa (below), which would then be placed in the bedroom to detect cardiac arrests where they occur most often, and where no one is likely to be able to respond.

DOES IT WORK?

Yes, according to the paper published in *npj Digital Medicine*. The tool can detect agonal breathing 97% of the time when the smart device is placed up to six metres away from the person. Study author Jacob Sunshine said, "This kind of breathing happens when a patient experiences really low oxygen levels. It's sort of a guttural gasping noise, and its uniqueness makes it a good audio biomarker to use to identify if someone is experiencing a cardiac arrest."

WHAT IS IT LISTENING FOR?

The researchers gathered sounds of agonal breathing from 911 calls in Seattle. Since cardiac arrest patients are often unconscious, in many of the calls bystanders recorded the breathing by putting phones up to the patient's mouth so the dispatcher could determine whether the patient needed immediate cardiopulmonary resuscitation. The researchers collected 162 calls between 2009 and 2017 to create 7316 samples.

WHAT IF I'M JUST A HEAVY SNORER?

The team tested for just that. They created a negative dataset using 83 hours—7305 samples—of audio data collected during sleep studies. These contained typical sleeping sounds, such as snoring or obstructive sleep apnoea. And they altered the algorithm to classify breathing as agonal only when two distinct events at least 10 seconds apart were detected. This cut the false positive rate to 0%.

Elisabeth Mahase, *The BMJ*

Cite this as: *BMJ* 2019;365:l4362

David Sellu (centre) spent 15 months in jail before his conviction was quashed and he was cleared of failing to provide good clinical care

Poor induction blamed for higher GMC referral rate among BAME doctors

Poor induction, support, and feedback could be behind the disproportionate numbers of black, Asian, and minority ethnic (BAME) doctors who are referred to the GMC for fitness to practise concerns, a report has found.

Between 2012 and 2017, 1.1% of BAME doctors were referred, twice the 0.5% among white doctors. The referral rate among doctors who qualified outside the UK is nearly two and a half times that among UK graduates (1.2% versus 0.5%).

The Fair to Refer report was based on interviews and focus groups involving 262 people, including GPs, locums, specialty and associate specialist doctors, and consultants, some of whom qualified overseas and some in the UK.

The report, commissioned by the GMC, found a combination of factors, including inadequate induction or lack of support for doctors new to the UK or the NHS, and a lack of effective, honest, or timely feedback. The report says some clinical and non-clinical managers avoid difficult conversations, particularly if they are of a different ethnic group from the doctor.

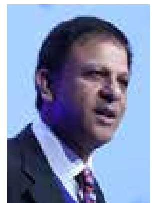
The report also says that some working and contractual patterns leave doctors isolated, meaning they lack exposure to learning experiences and resources. In addition, some groups of doctors are treated as "outsiders," creating barriers to opportunities and making them less favoured than "insiders," who experience greater privileges and support.

Charlie Massey, chief executive of the GMC, said, "We want to avoid doctors being referred to us for problems that can be solved earlier locally. We want patients to get the best possible care, which is best delivered by doctors working in supportive and inclusive surroundings."

Roger Kline, research fellow at Middlesex University Business School and a report author, said, "At a time when the NHS is seeking doctors from around the world to support it, it is essential that their expertise is recognised and that they are supported and treated fairly."

Chaand Nagpaul, chair of BMA council, said, "The BMA has long campaigned for fairness and equality, and many of the report's recommendations reflect our own calls for change. As I said in my speech to BMA members at our annual conference, we cannot allow doctors working hard in tough conditions to continue practising in fear."

We cannot allow doctors working hard in tough conditions to continue practising in fear Chaand Nagpaul, BMA



THE REPORT MAKES FOUR RECOMMENDATIONS

- Improve support for doctors new to the UK or the NHS or whose role is likely to isolate them
- Ensure engaged and positive leadership more consistently across the NHS
- Create working environments that focus on learning, rather than blame, when something goes wrong
- Develop UK-wide mechanisms to ensure delivery of the recommendations

Jacqui Wise, London

Cite this as: *BMJ* 2019;365:l4391

Early retirement among NHS doctors trebles in a decade

The number of doctors taking early retirement has trebled in the past decade, NHS figures show.

From 2007-08 to 2018-19 the number of GPs and hospital doctors in England and Wales taking voluntary early retirement or retiring because of ill health rose from 386 to 1186. In total the number of doctors retiring rose by 7%.

Since 2010, changes to pension tax laws have left many senior doctors facing large bills. The BMA says these changes have prompted 3500 doctors to retire early since 2016.

Workload

The figures reflect BMA findings that workload pressures and other factors were pushing more doctors to retire early, said David Wrigley, council deputy chair. "Doctors are working far more hours than they should be, and this is having a devastating effect on their wellbeing.

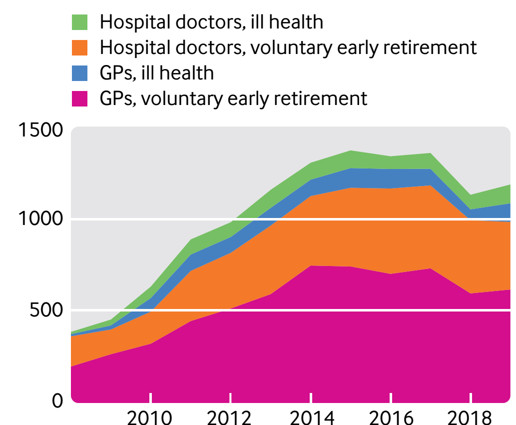
"A BMA survey found that 80% of doctors were at high risk of burnout, and—alongside pension changes—it is no surprise that we have seen such a rise in GPs and consultants opting to retire early."

The figures were released to *The BMJ* by the NHS Business Services Authority in response to a freedom of information request.

Tom Moberly, *The BMJ*

Cite this as: *BMJ* 2019;365:l4360

NUMBER OF DOCTORS RETIRING EARLY BY TYPE AND REASON



Doctors spurn NHS long term plan

Doctors at the BMA's annual representative meeting expressed strong doubts about NHS England's strategy for the next decade, voting overwhelmingly against a part of a motion that the meeting "welcomes and supports the aims and initiatives of the plan."

Tom Dolphin (below), a consultant anaesthetist and member of the BMA Council, proposing the whole motion, compared the *NHS Long Term Plan* to a "sketchy unfunded wish list for the NHS."

"The plan has two major problems: workforce and finances. It could have been good, but there's no detail, too many big reforms, and nowhere near enough money," he said. "It's doomed to failure. The government needs to think again."

It could have been good, but there's no detail, too many big reforms, and nowhere near enough money. . . It's doomed to failure
Tom Dolphin, BMA Council

A majority of representatives voted in favour of parts of the motion saying that underfunding made the plan's ambitions largely unachievable and that "the structural changes proposed are not in the interest of the NHS."

They also agreed that without an adequate workforce strategy the plan would precipitate a greater crisis.

Delegates voted for parts of a different motion that opposed funding cuts imposed through efficiency savings, shifting care from hospitals to the community without a concomitant increase in resources, and the long term plan being a route to a market driven healthcare system.

The motion had been proposed by the retired surgeon Anna Athow, of Enfield and Haringey division, who described the plan as a "business prospectus in code."

She said, "It is an anti-NHS plan, which is not care according to clinical need but the road to US market driven healthcare."

Richard Hurley, Belfast

Cite this as: *BMJ* 2019;365:l4392

Members to be polled on BMA's stance against assisted dying

The BMA is to poll members asking if it should adopt a neutral position on assisted dying rather than one against, after representatives passed the move by 149 votes to 115.

The current policy, reaffirmed at the 2016 annual meeting, is to oppose legalised physician assisted suicide for terminally ill people.

Proposing the motion, Jacky Davis, a consultant radiologist —who works for Healthcare Professionals for Assisted Dying and Dignity in Dying—said that even if everyone had access to the best hospice care at least 5000 people a year would die in unrelieved pain. She told members that the views of the many thousands of BMA members needed to be heard.

"To those who don't want this question asked, I ask why. We didn't get where we are as a profession by not asking questions because we're afraid of the answer. Otherwise we'd still be sharpening scalpels on our boots."

Richard Hurley, Belfast

Cite this as: *BMJ* 2019;365:l4398

Conference roundup

CONFERENCE ON GENDER BIAS

The BMA will co-host its first conference on gender bias with the Medical Women's Federation this November, the association's chair of council, Chaand Nagpaul, announced. He said he was "deeply saddened" by the recent allegations of sexism in the BMA and affirmed his commitment to making it an inclusive organisation. All BMA elected members will have equality and diversity training, and all members will be able to access online modules on equality, he said. Sexism in the BMA was due to be debated after *The BMJ* went to press.

NON-MEDICAL CLINICAL STAFF

Representatives supported calls for non-medical clinical staff to have a title that makes it clear they are not medically trained. The motion said that this group must belong to a regulatory body, although it should not be the GMC. In addition, the motion said that non-medical clinical staff must be seen as part of a multidisciplinary team and have appropriate indemnity agreed by their employers. That they should be subject to regular appraisals and revalidation was taken as a reference.

BMJ'S INDEPENDENCE

A motion proposing constraints on *The BMJ*'s editorial independence was defeated. Representatives voted against the motion calling for a "binding memorandum of understanding between the two bodies" to stop *The BMJ* acting "contrary to the business interests and policies of the BMA." Jay Lippincott (above), chair of the BMJ company, said voting for the motion would mean BMA members would be "giving up the right to know."

EXCEPTION REPORTING RIGHTS

Representatives debated a motion saying there was a need for mechanisms to "allow doctors to raise and resolve concerns affecting their health and welfare," and they backed a motion for the BMA to lobby for exception reporting across the profession. Exception reporting, introduced in the junior doctor contract in 2016, allows doctors to report when their work deviates from their agreed schedule and so may be unsafe.

CHILD RESTRAINT "INHUMANE"

"Developmentally harmful" painful control and restraint methods should be outlawed in secure children's homes, the conference agreed. Commenting, John Chisholm, chair of the BMA's medical ethics committee, said, "The use of pain inducing restraint on children and young people in detention should not be permitted under any circumstances, and the BMA will seek to lobby the government for the abolition of this practice."

Elisabeth Mahase, *The BMJ*

Cite this as: *BMJ* 2019;365:l4396

"Unacceptable rise" in out-of-area mental health placements

Seven NHS trusts made up more than half of all inappropriate out-of-area placements (OAPs) for acute mental health inpatient care between December 2018 and February 2019, show data from NHS Digital.

The government pledged to eliminate inappropriate OAPs by 2020-21 as part of the *Five Year Forward View*. The latest figures show, however, that from December 2018 to February 2019 the number of inappropriate OAP days increased by 6%, compared with the same period in 2017-18.

Adrian James, registrar of the Royal College of Psychiatrists, said, "This situation is totally unacceptable. While some parts of the country have made great progress in tackling this problem, other areas have struggled. Urgent investigations must be carried out in those areas, action plans drawn up, and better support offered to ensure they can meet the government's target of ending all adult inappropriate out-of-area placements by 2021.

The figures were taken from the Mental Health Watch website, a tool developed by the college to measure the mental health service's performance against government targets using NHS England and NHS Digital data.

Speaking to MPs at the launch of the website this week, patient speaker Imogen Voysey—who has used NHS mental health services in England for the past six years, said, "Hopefully all of you will look at what the services are like in your constituencies, and then you will come into work tomorrow and start making meaningful change."

Elisabeth Mahase, *The BMJ*

Cite this as: *BMJ* 2019;365:l4357

THE WORST TRUSTS

- Devon Partnership NHS Trust (above) (5715 days),
- Lancashire Care NHS Foundation (5500)
- Nottinghamshire Healthcare NHS Foundation (3705)
- South London and Maudsley NHS Foundation (4635)
- Norfolk and Suffolk NHS Foundation (3500)
- Southern Health NHS Foundation (4185)
- Barnet, Enfield, and Haringey Mental Health NHS (3130)

These made up over half of the inappropriate days (30370 of 58975)

Women's marks soar in Japan's medical schools as exam rigging ends

Female applicants are outscoring men in the first fair entrance exams at Japanese medical schools that were rocked last year by revelations of widespread exam rigging.

Juntendo University in Tokyo reported a pass rate of 8.28% among the 1679 women who took its medicine entrance exam this year. The pass rate among 2202 male candidates was 7.72%. Last year the male pass rate was 93% higher than the female rate.

An investigation by the education ministry concluded in December that nine medical schools out of 81 investigated had discriminated against women in their entrance exams. Of the nine, Juntendo University had the largest gender disparity in pass rates since 2013.

Tokyo Medical University, where the admissions scandal first erupted, reported its 2019 results last month. There, too, women showed dramatically improved scores. They achieved a pass rate of 20.2%, compared with 19.8% for men. Last year, men passed at more than three times the rate that women did.

Tokyo's exam rigging came to light last August, as ministry officials investigated allegations that the score of a health official's son had been increased in return for help obtaining a subsidy. They uncovered a far broader pattern of manipulated results.

In each year since at least 2006, investigators said, a fixed number of percentage points—in some years 10% but often 20%—was deducted from every woman's score. The school admitted the rigging, explaining it had been motivated by poor retention of female doctors in its hospital system.

"Necessary evil"

Japan faced a doctor shortage, medical school leaders said, and restricting the number of women doctors, who were considered more likely to leave the profession to raise children, was seen as a "necessary evil."

But "profound sexism" also played a role, said Kenji Nakai, who led the government inquiry.

"Society is changing rapidly and we need to respond to that. Any organisation that fails to utilise women will grow weak," the university's executive regent Tetsuo Yukioka said during a public apology. "That thinking had not been absorbed."

In September, the medical school approved the appointment of its first

WHO drops opioid guidelines after criticism of pharma influence

The World Health Organization is discarding two opioid guidelines after a report by two members of the US Congress alleged that they were tainted by drug manufacturers.

The report, coauthored by Kay Clarke (below), accused Purdue Pharma of working, through its international arm

Mundipharma, to expand the indications for chronic opioid use and minimise addiction risk concerns.

Mundipharma paid medical opinion leaders and sponsored "astroturf" patients' groups (set up by industry bodies) to demand easier access to opioids for pain treatment, the report alleged. Purdue faces extensive legal action in the US, where it has often been accused of leading a campaign to normalise opioid use.

WHO responded by saying it would

Protesters in Tokyo demanded changes to medical school exams last August

woman president, Yukiko Hayashi, the previous head of the pathophysiology department.

The school, which is facing a number of lawsuits over past admissions practices, said last month it had sent 44 letters granting places to people who were wrongly denied entry over the past two years. Of the 24 recipients who accepted the places, 16 were women.

The ministry inquiry also discovered exam rigging against men who had taken and failed admissions exams before, as well as numerous cases of favouritism shown to children of donors, alumni, and the well connected.

The newspaper *Asahi Shimbun* surveyed all of Japan's 81 medical schools on their 2019 entrance exams. The overall pass rate among men was 8% higher than for female candidates. In 2018, the pass rate among men was 22% higher than among women.

At just 20.1%, Japan has the lowest proportion of women in its doctor workforce among the 35 OECD states. Britain is close to average with 46%, while women account for 34% of doctors in the US and more than half of doctors in many EU countries.

Owen Dyer, Montreal

Cite this as: *BMJ* 2019;365:l4338

Juntendo University in Tokyo reported a pass rate of 8.28% among the 1679 women who took its medical school entrance exam earlier this year. The pass rate among 2202 male candidates was 7.72%

investigate, and three weeks later it has moved to discontinue the criticised guidelines, 2011's *Ensuring Balance in National Policies on Controlled Substances* and the *Who Guidelines on the Pharmacological Treatment of Persisting Pain in Children with Medical Illnesses*, published in 2012.

In a statement WHO said it took the report very seriously but also saw the guidelines as outdated. It said, "WHO is discontinuing these guidelines in light of new scientific evidence. This will also address any issues of conflicts of interest that have been raised."

WHO remains concerned about untreated pain, especially in developing countries, the statement says, but recognises a need to balance this against dependence concerns. Experts fear that an opioid epidemic in some developing countries could dwarf the US crisis.

The guidelines are being discontinued in light of new evidence. It will also address conflicts of interest WHO

Mundipharma is embroiled in a corruption case in Italy, where it is accused of paying academics, doctors, and regulators to promote opioid use.

Owen Dyer, Montreal

Cite this as: *BMJ* 2019;365:l4374

FIVE MINUTES WITH . . .

Alexis Goosdeel

The director of the Lisbon based European Monitoring Centre for Drugs and Drug Addiction explains the impact of a no deal Brexit

"If there is no agreement [on Brexit], there would no longer be any cooperation between the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and the UK. In practical terms, this means the UK would not be part of the EU's early warning system on new psychoactive substances. As the annual report we released this month shows, 55 new drugs—about one a week—were reported to the system in 2018. The system also makes faster risk assessment possible and Europe-wide control of substances."The UK has two members on our scientific committee of 15. The new committee would not be able to accept British applicants, and the UK would not participate in any expert groups. Nor could it benefit from the co-financing of the system of drug focal points in the Reitox network, which in the UK's case is part of Public Health England.

"The absence of British involvement would have an impact on the EMCDDA. We would lose the high quality data that the UK, like other EU countries, provide annually, and the UK would not receive the alerts, including confidential information.

THE ABSENCE OF UK INVOLVEMENT WOULD HAVE AN IMPACT ON THE CENTRE

"We would lose British expertise. If you look at the history of drug demand reduction and intervention over the past 30 years, the UK, along with the Netherlands, has been pioneering innovative measures, such as methadone substitution treatment, needle exchange programmes, and various harm reduction initiatives. These have been important contributions to what has become the European approach on drugs. Today, the UK is still investing a lot of money in forward looking drug related research.

"Of course, we will not completely lose access to the research. The EMCDDA has lots of exchanges with international organisations, and this informal cooperation would continue. But the structured exchange of information with the UK would stop. In the current circumstances, nobody knows what will happen."

Rory Watson, Brussels Cite this as: *BMJ* 2019;365:l4306

THE BIG PICTURE

Complexities of Ebola in DRC

Family members and healthcare workers gather for the funeral of a baby killed by Ebola in Beni, a town in the North Kivu province of the Democratic Republic of the Congo.

The outbreak, with more than 2100 cases and more than 1412 confirmed deaths in just over a year, is the second largest in history and has become what John Johnson of Médecins Sans Frontières told the *Guardian* was "one of the most complex health emergencies the world has seen."

Attempts to curtail the spread of the virus—reports of it having reached Uganda emerged last week—have been confounded by complexities within the country. One of the hardest for national and international agencies to overcome is a widespread belief that the disease does not exist and the deaths are a result of poisoning. Infected people and their families therefore will not take the necessary precautions to confine the virus or allow themselves to be vaccinated.

Such is the level of the public's distrust that the healthcare facilities treating those patients who are willing to accept that they have Ebola have been attacked. In April a WHO doctor was shot to death in Butembo University Hospital, North Kivu, by one of a gang of gunmen, who accused the hospital of "perpetuating false rumours about Ebola" before shooting the doctor in the stomach.

Alison Shepherd, *The BMJ*

Cite this as: *BMJ* 2019;365:l4405

REUTERS

ENDOCRINOLOGY

The wrong diabetes? How testing for C peptide might help

One patient with a misdiagnosis was the catalyst for offering the test to all patients with type 1 diabetes in the Lothian region, writes **Jacqui Wise**

Sophie Fleming thought she would be taking insulin for the rest of her life until the test proved her original type 2 diagnosis was wrong

Sophie Fleming was diagnosed as having type 1 diabetes mellitus when she was 8 years old and was treated with insulin for 27 years. Her diagnosis, however, was wrong.

This was discovered by chance in 2016. Her father had been diagnosed with type 2 diabetes, but a genetic test found that he actually had a form of monogenic diabetes (also known as maturity onset diabetes of the young, or MODY), a rare form of diabetes caused by a mutation in a single gene.

Fleming was subsequently tested: she had inherited the same genetic variant. A test for C peptide showed that she was producing some insulin, which meant that her diabetes could be well controlled with sulfonylurea tablets, which preclude the need for glucose monitoring.

"It's been life changing. I thought I would be on insulin for the rest of my life," she says.

Insulin can cause weight gain and hypoglycaemia, and taking it is restrictive and inconvenient for patients. They may have to wear an insulin pump 24 hours a day and take multiple blood tests.

"Going on holiday is much easier now, for example, packing and getting through airport security," says Fleming

On our radar

Mark Strachan, consultant in diabetes and endocrinology at the Western General Hospital in Edinburgh, tells *The BMJ*,

We absolutely should be offering C peptide testing to everyone with a label of type 1 diabetes
Mark Strachan, Edinburgh

"We have a large clinic of people with monogenic diabetes, and we thought we were good at picking it up. But Sophie had never been on our radar. That made us think there must be other people in the clinic with a diagnosis of type 1 diabetes who were misclassified."

Strachan read studies by researchers at the University of Exeter that showed that C peptide testing can be carried out feasibly and cheaply in clinical practice (box).

The Western General Hospital in Edinburgh now offers the blood test routinely to all patients who have been diagnosed as having type 1 diabetes for three years or more. So far it has tested 801 patients and identified 10 new cases of monogenic diabetes and reclassified 28 people as having type 2 diabetes. Insulin has been stopped in 12 people so far, some of whom had been taking it for decades.

NICE does not recommend routine C peptide testing in people with diabetes. Guidelines from 2015 say it should be considered if there are atypical features, or a suspicion that the patient may have monogenic diabetes, or if classification is uncertain.

The guidance is currently out for consultation, however, and the Lothian and Exeter teams are hoping to change

VOISIN / SPL

Testing for C peptide

C peptide, produced in equal amounts to insulin, can be used to measure how much insulin someone is producing even if they are injecting insulin.

Low C peptide indicates insulin deficiency (usually from type 1 diabetes), which means that the patient will need lifelong insulin treatment. High C peptide shows that the patient is producing some insulin and could have another form of diabetes that could be controlled by lifestyle change and tablets.

Until recently, C peptide testing was possible only by stopping a patient's insulin treatment in hospital, giving them a liquid meal or glucagon injection, and taking multiple blood samples, explained Angus Jones, a clinician-scientist with the National Institute for Health Research, who is part of a team at the University of Exeter. The blood samples had to be kept on ice, he said.

The team developed a new urine test. A preservative keeps the urine sample stable for three days, making testing viable in primary care and outpatient clinics. Furthermore, the team showed that C peptide could also be measured in a single blood sample taken during a standard clinic visit, without altering insulin. Testing in either blood or urine costs about £10.

High C peptide shows that the patient is producing some insulin

Sulfonylureas tablets makes the self testing of blood sugar levels unnecessary for patients with monogenic diabetes

this recommendation. "We absolutely should be offering C peptide testing to everyone with a label of type 1 diabetes. It can make a transformative difference and is very cost effective," says Strachan.

A spokesperson for NHS National Services Scotland said that it was considering rolling out the programme throughout Scotland.

"Misdiagnosis of diabetes is very common," says Jones.

The main clinical features used to distinguish types 1 and 2 are age and body mass index. At least 42% of type 1 diabetes occurs after the age of 30, and late type 1 diabetes has similar characteristics to young onset disease, with 89% of patients needing insulin treatment within a year of diagnosis. And contrary to assumptions, many people with type 2 diabetes are underweight, and because of a general increase in obesity, many people with type 1 diabetes are overweight.

Jones led recent research that showed that 38% of patients with definite type 1 diabetes occurring after age 30 were initially treated as having type 2 diabetes. Half of those misdiagnosed were still diagnosed as type 2 diabetes 13 years later.

"Our research shows that if a person diagnosed as having type 2 diabetes needs insulin treatment within three years of their diagnosis, they have a high chance of missed type 1 diabetes," says Jones.

Prime minister Theresa May was initially misdiagnosed as having type 2 diabetes. She was first treated with lifestyle changes and drugs, which did not work. Eventually she was retested and identified as having type 1 diabetes.

Conversely, about 10% of adult onset patients treated as having type 1 diabetes in fact have other types, says Jones. "Although insulin works in this group, it is an expensive treatment, can cause weight gain and hypoglycaemia, and is a lot more inconvenient for patients than simple tablets."

Sulfonylureas also make glucose monitoring unnecessary and offer the NHS cost savings.

Misdiagnosed monogenic diabetes

Patients with monogenic diabetes, like Sophie Fleming, are often misdiagnosed as having either type 1 or type 2 diabetes. According to Diabetes UK, monogenic diabetes affects 1-2% of people with diabetes, still some 20 000 to 40 000 people in the UK. However, most lack the diagnosis, says Strachan, as is shown by marked regional variation.

"Getting diagnosed with the right type of diabetes is so important, as it ensures that people get the right treatment early," says Douglas Twenefour, deputy head of care at Diabetes UK. "This in turn could help them avoid serious complications in the long run."

Patients with some types of monogenic diabetes, like Fleming, respond well to small doses of sulfonylurea, which can restore β cells' ability to make enough insulin.

Fleming, like many patients with diabetes, struggled with lifelong monitoring and daily insulin treatment. "When I was a child I would hide sweeties because I was told I couldn't have them so wanted them more," she says. "I was a typical teenager, and I wasn't the most diligent about controlling my blood sugar."

Years of suboptimal control

At the age of 22 she was a student nurse, and slight changes were detected in her eyes. At that point she started to take more care to control her diabetes. However, tight blood glucose control meant almost daily hypoglycaemic episodes. And Fleming now has advanced retinopathy after years of suboptimal control with insulin.

"If Sophie had been on sulfonylurea therapy from the time of diagnosis her glycaemic control would have been so good that I could confidently say she would never have developed eye complications," says Strachan.

Monogenic diabetes may be considered more commonly in people who have had a recent diagnosis, but there is a large, historic cohort of people with longstanding diagnoses of type 1 diabetes that may not be accurate, says Strachan. "Sophie's diagnosis was made so many years ago that it just became an established fact."

Jacqui Wise, freelance journalist, London
jacquiyoung1@gmail.com

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EDITORIAL

All creatures great and small

Biodiversity is critical to human health

A recent report from the UN forecasting the pending loss of one million or more species from the planet seems an unlikely topic for a medical journal.[1] After all, what does this loss of life, as tragic as it is, have to do with the daily practice of medicine? As it turns out, almost everything.

Around 65% of all new small molecule drugs licensed by the US Food and Drug Administration between 1981 and 2014 owe their existence to the molecular peculiarities harboured within life on earth.[2] Of the 14 major classes of antibiotics, for example, 10 would not exist if they hadn't been given to us by an assortment of fungi and bacteria. Antivirals and antiparasitics are no different. Many, if not most, are directly or indirectly based on natural products, and some come from exotic creatures, such as the sea sponges that live in highly endangered coral reef habitats.[2,3]

We depend on biodiversity for new drug leads but also for novel therapeutic strategies. Antimicrobial resistance is a serious threat to our health. We might learn a good deal about how to better manage and prevent infections by studying amphibian species, which have developed a coordinated chemical defence that keeps pathogens at bay and may minimise development of resistance.[5] If only we weren't losing amphibian species faster than almost any other group of organisms on the planet.

Shark tale

We look to other life forms to advance our understanding of disease. Sharks' abilities to rapidly heal wounds have been known for decades.[6] How they do so largely remains a mystery, but the genome of the white shark, *Carcharodon carcharias*, recently provided tantalising clues to this species' wound healing capability.[7]

The genome of the white shark recently provided tantalising clues to this species' rapid wound healing capability

Aaron Bernstein, hospitalist, Division of General Pediatrics, Boston Children's Hospital
aaron_bernstein@hms.harvard.edu

Elasmobranchs, which include sharks, were the first creatures to develop adaptive immunity and may hold important clues about how our own adaptive immune systems may falter in autoimmune diseases. The white shark, along with more than a third of all shark species, is at risk of extinction.[8]

The current upheaval in the biosphere has contributed to many of the most worrisome infections in recent decades, including SARS, HIV, Nipah virus, and Ebola. Mass destruction of habitats and overexploitation of species on land and in the oceans stirs political unrest and wars, which have contributed to the greatest number of distressed migrants—some 65 million, almost half of whom are children—in the world today.[9] Many seek refuge in developed countries and many need medical care.

Solutions start with setting aside and protecting more space for other organisms on land and in water. About 75% of land and 66% of ocean areas have been "significantly altered" by people, according to the UN report. Naturalist E O Wilson argues that to forestall the ongoing "extinction spasm", half the Earth's land surface needs to be secured for wildlife. Only about 15% is protected today.[10] Also critical will be rapid reductions in greenhouse gas emissions as climate change threatens at least 16% of species with extinction if left unaddressed.[1] Healthcare has much to offer both these goals as it contributes disproportionately to waste production and greenhouse gas emissions. Healthcare systems have started to cut waste and carbon pollution[11] but most have only just begun the journey towards sustainability. Clinicians should use their voices to spur broader public interest in decarbonisation and to lobby governments and institutions to take decisive action.[12,13]

High stakes

Medicine already owes more to biodiversity than can be counted in dollars or disability adjusted life years. But the next time you encounter an untreatable disease or diagnostic dilemma, consider that we have, to date, named—let alone characterised—no more than one third of all the creatures on Earth,[14] and what all that untapped knowledge might mean to the health of our patients. Given all that is at stake, few investments may be more important to the welfare of our own species than to invest in knowing, and protecting, all the others with whom we share the planet.

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EDITORIAL

Neglected causes of post-traumatic stress disorder

Patients with psychosis, other delusional states, or autism are also at risk

Post-traumatic stress disorder (PTSD) has been defined by successive editions of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (most recently DSM-5). The diagnosis requires an objectively traumatic event that involves exposure to "death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence." This focus on objective event characteristics maintains PTSD as a response to extreme rather than everyday stress, but it overlooks mounting evidence that subjective responses to traumatic events predict PTSD just as or more strongly.[1]

Hallucinations and delusions

Traumatic events, both objective and subjective, are common in the lives of patients with psychosis. Hallucinations and delusions can also be extremely frightening and can be experienced in the same way as an actual threat of serious physical injury. People with the delusion that others are trying to kill them, for example, might experience PTSD symptoms such as intrusive memories, flashbacks, and nightmares related to episodes when they thought that they were about to be attacked. That the experience of psychosis itself can be traumatic has been known for at least 30 years,[2] and in recognition of this an informal category of "psychosis related PTSD" has been proposed by researchers.[3,4]

Similar considerations apply to people treated in intensive care units, who experience high rates of post-traumatic symptoms after discharge.[5] Although these symptoms occur in the context of a genuine threat to life, their content is frequently related to delusions and hallucinations induced by prescribed drugs.

In detailed interviews, patients have reported delusions such as being poisoned, assaulted, tortured, kidnapped, threatened with death, or put on trial. Elements of hospital care such as injections, blood tests, and endotracheal tubes have merged with hallucinatory content to form terrifying delusional narratives.[6] As with psychosis, post-traumatic symptoms arising from these experiences would not traditionally lead to a diagnosis of PTSD because the DSM criteria assume that affected individuals have the mental capacity to evaluate events objectively.

Failure to diagnose PTSD because of the nature of the triggering event might result in the denial of treatment

Chris R Brewin, emeritus professor in clinical psychology, University College London
c.brewin@ucl.ac.uk
Freya Rumball, clinical psychologist
Francesca Happé, professor of cognitive neuroscience, King's College London

Finally, people with autism spectrum disorder (ASD), a neurodevelopmental condition associated with atypical processing of the social and sensory world, often show intense threat responses to apparently harmless situations, such as changes in routine, social situations, or sensory stimuli. ASD may be associated with unique experiences and perceptions of trauma.[7-9]

Reduced emotional coping skills place people with ASD at high risk of mood and anxiety disorders after exposure to stressors such as social misperceptions, prevention of repetitive or stereotyped behaviours, and aversive sensory experiences.[10] Among people with ASD, these atypical stressors seem to be associated with PTSD symptomatology as often as objectively traumatic events.[11] If so, rates of PTSD currently reported among children and adolescents with ASD (0-5.9%, mean 2.85%) are an underestimate.[12]

Effective treatment of these neglected groups requires the same trauma focused therapies that are recommended for PTSD after objectively traumatic events.[12,13] When DSM-5 is used, failure to diagnose PTSD because of the nature of the triggering event might result in the denial of treatment. We therefore recommend adding an "altered perception" subtype to existing PTSD criteria in a future version of the DSM. This would preserve PTSD as a response to extreme stress while recognising that, for those with atypical perceptual or cognitive processing, intense fear or horror might be provoked by events not traditionally considered traumatic.

Diagnostic flexibility

In contrast to DSM-5, the World Health Organization's international classification of diseases (ICD-11) will allow clinicians to make a diagnosis of PTSD based on their assessment of whether an event involves "exposure to an extremely threatening or horrific event or series of events,"[14] thus allowing flexibility over whether the threat is subjective or objective.

Whichever system is in use, clinicians must be alert to the possibility of PTSD in patients with psychosis, other delusional states, or ASD who have experienced subjectively terrifying events. They should not be dissuaded from referring symptomatic patients for treatment simply because current diagnostic rules neglect these patients' altered perceptual experiences.

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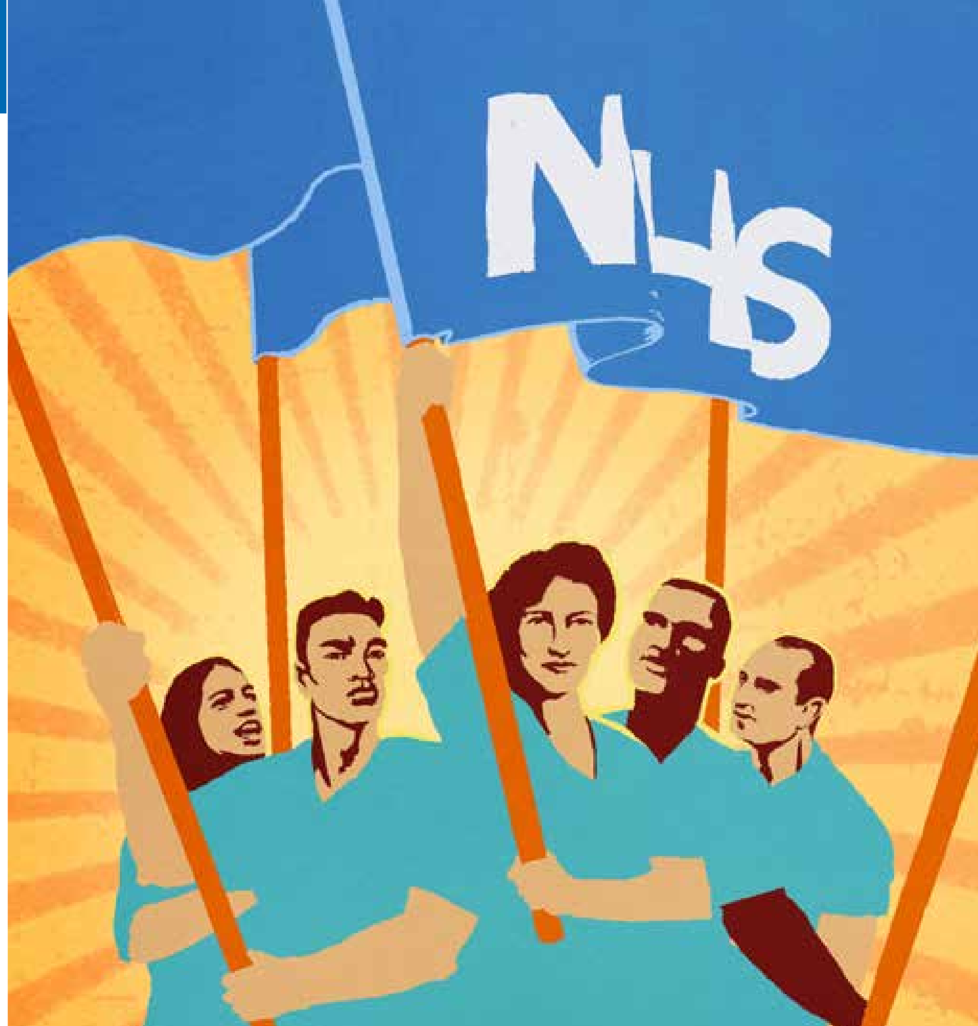
NHS LEADERSHIP

Why are there still so few medical chief executives in the NHS?

Jacqui Thornton spoke to five doctors who have made it to the top of the management ladder to find out what spurs on the few who do make the step up to be leaders



When Navina Evans, a consultant psychiatrist, was asked by her trust's chief executive, the forensic psychiatrist Robert Dolan, to consider starting the journey potentially to take his place, she was taken aback.

Evans was fulfilled in her clinical work at East London NHS Foundation Trust, and told *The BMJ* it had "never occurred to her" as a possibility to move up. After thinking it over, she told Dolan her answer was no. "Go away, think again, and come back with a different answer," he replied.

Doctors need to step up. We need to come together and believe we can actually make a difference
Navina Evans, East London NHS Foundation Trust

She remains "very grateful" that she did. Dolan's instincts for talent were right: after spells as chief operating officer and deputy chief executive, Evans succeeded him in 2016. For the past two years she has been named second most influential chief executive in the NHS by the *Health Service Journal*.

She has a strong message for doctors who feel how she once did. She finds it sad when she watches *Question Time*, reads Twitter, or goes to dinner parties and hears doctors talk about how awful working in the NHS is. "Doctors need to step up," she says. "We need to come together and believe we can actually make a difference and change the narrative."

The number of clinical chief executives is growing. In one survey of 129 NHS chief executives in England 8.3% of those appointed before 2015 were medically qualified, but in 2015-17 the proportion had grown to 10.5%. In a later survey of 78 chief executives a third were clinically trained, mostly as nurses and doctors, with a few as pharmacists and other health professionals.

The peer and surgeon Ara Darzi put a focus on clinical leadership in his 2008 *NHS Next Stage Review*. When he was health secretary for England, Jeremy Hunt effected measures to ensure more home grown clinician chief executives. This month's *Interim NHS People Plan* proposes more structured career paths for clinicians to pursue a career in leadership.

Fear of the dark side

Opinions differ as to why so few home grown doctors "go to the dark side," as some put it. Evans sees no "them or us" scenario pitching doctors against NHS managers, nor any cause for friction among doctors and nurses or pharmacists who have gone down the clinical leadership route. "We need to take out that element of competition, because there's plenty of room for everybody," she says.

The *BMJ* columnist David Oliver notes that many doctors are already clinical leaders, directing quality, safety, and service delivery, heading their own departments or divisions, or working as medical directors. Many simply don't want the top job, he told *The BMJ*, with its

perceived huge responsibility and accountability. "Maybe there's no problem to solve," he said.

Not all doctors would necessarily make a good chief executive, though growing evidence indicates that expert leaders, such as doctors, are associated with improved organisational performance.

Amanda Goodall, a researcher in leadership and performance, has used reports from UK and overseas doctors on their line managers who are also doctors in a study of the relation between clinical skills and managerial performance. The results indicate that line managers who are rated as good or outstanding clinicians are associated with high levels of job satisfaction among employees and low intentions to quit. In other words, great doctors seem to make great managers.

Innate curiosity and a desire to fix

One common factor among medical chief executives is having done an extraordinary range of different jobs, and they are fascinated by doing something new. Adrian Bull, chief executive of East Sussex Healthcare NHS Trust, and former chief executive at the specialist burns hospital Queen Victoria Hospital in West Sussex, has gone from being a doctor in the Royal Navy, and training as a GP, to a career in public health medicine, medical director at an NHS trust, and a 12 year stint in the private sector with AXA PPP and Carillion Health.

He realised, aged about 30, that his ambitions lay in leading. "I was much more interested in how the system around me was working." As a public health consultant he admits that he was "a bit cocky" and wanted to run the show. "I thought, people aren't doing public health quite the way I think it should be done."

Like Bull, Matthew Shaw, chief executive of Great Ormond Street Hospital in London, also worked in the private sector and, unusually, is a surgeon turned chief executive. A year after becoming a consultant spinal surgeon at the Royal National Orthopaedic Hospital he became clinical director, then a year later medical director, followed by deputy chief executive. After working for Bupa for 15 months as medical director, he joined GOSH in the same role and was appointed chief executive in December. He's 44.

Shaw says, "As I was starting my career it was pretty obvious there were lots of things that needed fixing. I thought, 'Why wait until I'm in my 50s or 60s to get stuck in and try to improve stuff?'" He acknowledges he's "slightly different from my tribe."

Others have not worked in the private sector but have filled varied roles in the NHS. Jackie Bene, who has been chief executive at Bolton NHS Foundation Trust for six years, switched from being a consultant geriatrician to acute medicine, as well as being divisional lead and then medical director at the trust.

I thought "why wait until I'm in my 50s or 60s to get stuck in and try to improve stuff"

Matthew Shaw, Great Ormond Street Hospital

She says, "I've recognised over the years that I get bored and like variety. [My job] has lots of really good challenges. I find myself getting entrenched in politics and socioeconomic and strategic discussions. It's all very interesting."

Like surgeons, fewer GPs become chief executives. Claire Fuller, senior responsible officer for Surrey Heartlands Health and Care Partnership, an integrated care system, is a GP who started down the leadership path after she had children. She went from clinical chair at Surrey Downs CCG to clinical chief officer, and then to the integrated care system's clinical lead role at Surrey Heartlands before taking the top job. In 2017 she was named clinical leader of the year by the *Health Service Journal*. She finds her role fascinating. "Working closer with local government, on devolution, there's always something new to find out about."

Impact on a wider scale

Saffron Cordery, deputy chief executive at NHS Providers, says that

HOW TALENT IS BEING NURTURED

The number of schemes aimed at encouraging young doctors with an interest in leadership is growing. There are also programmes to help mid-career doctors who weren't among that early self identifying cadre with a burning desire to lead.

- Health Education England and the Royal College of Physicians of London are piloting portfolio training in which core medical trainees take one day a week out of clinical training to train in medical education, quality improvement research, or clinical informatics, with an emphasis on leadership.
- The Royal College of Physicians' chief registrar scheme provides protected time for senior trainees to practise leadership and quality improvement while in clinical practice. In 2019-20 a total of 55 trusts are involved.
- For more senior doctors, the NHS Leadership Academy has the Aspiring Chief Executive programme and a fast track scheme for clinical executives.
- Darzi fellowships in clinical leadership are full time for one year and available In London and Kent, Surrey, and Sussex. Fellows also complete a leadership development programme at London South Bank University.
- The National Medical Director's Clinical Fellow Scheme for trainee doctors in England is managed by the Faculty of Medical Management and Leadership of the UK medical royal colleges and is sponsored by NHS England. Fellows spend 12 months in a national healthcare affiliated organisation outside clinical practice to develop their skills in leadership, management, strategy, project management, and health policy.
- The Health Foundation runs Generation Q, a leadership and quality improvement programme for clinical and non-clinical fellows.
- Masters degrees courses in healthcare leadership include the executive masters in medical leadership at Cass Business School in London, which is open only to doctors.

Saffron Cordery, deputy chief executive at NHS Providers, says the challenges of NHS chief executive roles have never been greater, which is why such programmes have a key role. "We are seeing a really high success rate, with new leaders feeling equipped to make a positive impact and bring their experiences to these frontline roles," she says. "The reason these programmes work well is the focus on development, through learning as a group and from the skills of others. This is playing its part in creating a bigger pool of talented and credible future leaders."

medical chief executives tend to fall into two categories. There are those who think that to achieve what they want they need to work beyond the clinical realm, and then those who are more reluctant but realise that their organisation needs them to step up.

Bene was very much in the second camp. When she became a consultant geriatrician in 1998, becoming chief executive was the "last thing on my mind," she says, but she added to her responsibilities by becoming a divisional lead and then medical director.

When the trust got into financial difficulties, and Monitor intervened, the executive chair encouraged her into the deputy chief executive role, acting up as chief executive. It took 6-12 months to persuade her to go for the substantive post. Bene says it's probably the best job she's ever had, hugely rewarding because of what she can achieve, organisationally, for thousands of patients and hundreds of staff. "The sphere of influence you have to really make a difference is enormous. The reach is great."

Other leaders echo having this level of influence. Evans says, "You're having an impact on millions, which is amazing." Bull moved back to the NHS from the private sector because he was aware that his efforts there were relevant to relatively few people and he wanted to affect more people.

Dispelling stigma

Communicating this impact and the professional and personal rewards are difficult because of persistent stigma about clinical managers.

Evans thinks there's an "old school" of doctors who say, "I didn't go into medicine to be a manager," but who as consultants are already acting as "micro-chief executives." She says, "They need to really look at what they're doing."

Shaw recently gave a talk on leadership to a room full of clinicians and asked them to raise their hands if they would like to shadow him. No one did, but afterwards three people emailed expressing interest.

He says the stigma about being a manager in the clinical world must be dispelled. "We all serve a purpose in a job, we're all part of the cogs that turn the wheels, and so don't be afraid of stepping out, doing different things, and going where your interests lie."

Cordery says that shadowing such as offered by Shaw is critical. "Everyone needs exposure to what the [chief executive] role really is. Everyone needs to hear more from those who are already doing it to understand and to learn."

Responsibility overload

Cordery adds that doctors who are used to being in control of their environment and their realm may find "stepping out" uncomfortable, but she believes that their rigorous training, practical and intellectual, equips them for the job.

It is a "colossal job," says Bene, "but it's very doable." She adds, "You've got all the skills you need as a doctor, as a consultant. You've got a lot of leadership skills already that are just intrinsic, and it's easy to translate them into a wider leadership role."

Fuller agrees: "I'm just a jobbing GP. There's nothing exceptional in the skills I have got along the way. It's putting them together in the right place—and being brave enough to give it a go."

Lack of credibility

A common reason for doctors' reluctance to move to senior leadership is not wanting to give up clinical practice and losing professional credibility. Oliver points out that nurses in senior management don't seem to have this concern.

Three of the five bosses *The BMJ* spoke to chose to stop practising completely, two of them reluctantly. Evans stopped last year after sometimes feeling anxious about doing so little

clinical work. Shaw stopped operating in April, which he found difficult, "because I've trained long and hard to get where I got." Bull gave up his licence years ago when he went to work for PPP. Evans says it doesn't affect her credibility. "The most important thing about being a doctor is the human connection, not your technical skills. I feel I can hold my own with any doctors."

The others still do a small amount of clinical work, not for credibility but for satisfaction. Bene does a morning session a week in acute medicine. She would like a system where it is natural for chief executives to retain some clinical practice. Fuller, who does one day a week, thinks this is too little to make her credible as a GP. "I tried not doing it but I really missed it."

But Cordery believes that having an influence on the delivery of care and adding highly complex challenges to your skillset "is the ultimate credibility."

I get entrenched in politics and socioeconomic and strategic discussions. It's all very interesting

Jackie Bene, Bolton NHS Foundation Trust

Job insecurity and the future

Giving up your licence to practise makes it much harder to go back to medicine if you are sacked—a high risk for NHS chief executives, who last just three years on average. This is a major barrier, given that GPs and consultants have high job security.

Evans was again influenced by her boss Dolan, who told her, "Don't become a chief executive until you can afford not to have a job." Her plan B is to do an English degree.

For younger doctors, the risk is greater. Shaw said he thought long and hard about this point but decided to be pragmatic, an attitude he found in abundance in the private sector, where job turnover is high.

Cordery says the system needs to dispel the idea that every time something goes wrong the chief executive must be removed. "We've got to stop sacrificing the leaders—clinical and non-clinical—that we so desperately need," she says.

If the route to becoming chief executive isn't clear to you, make your own, say the doctors who have got there. Shaw says, "You don't have to be a consultant for 10 years before you apply for clinical leadership. Make your own path, make an impact, and opportunities will arise."

Jacqui Thornton, freelance journalist, London
jacqui@jacquithornton.com

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